FIG. 1

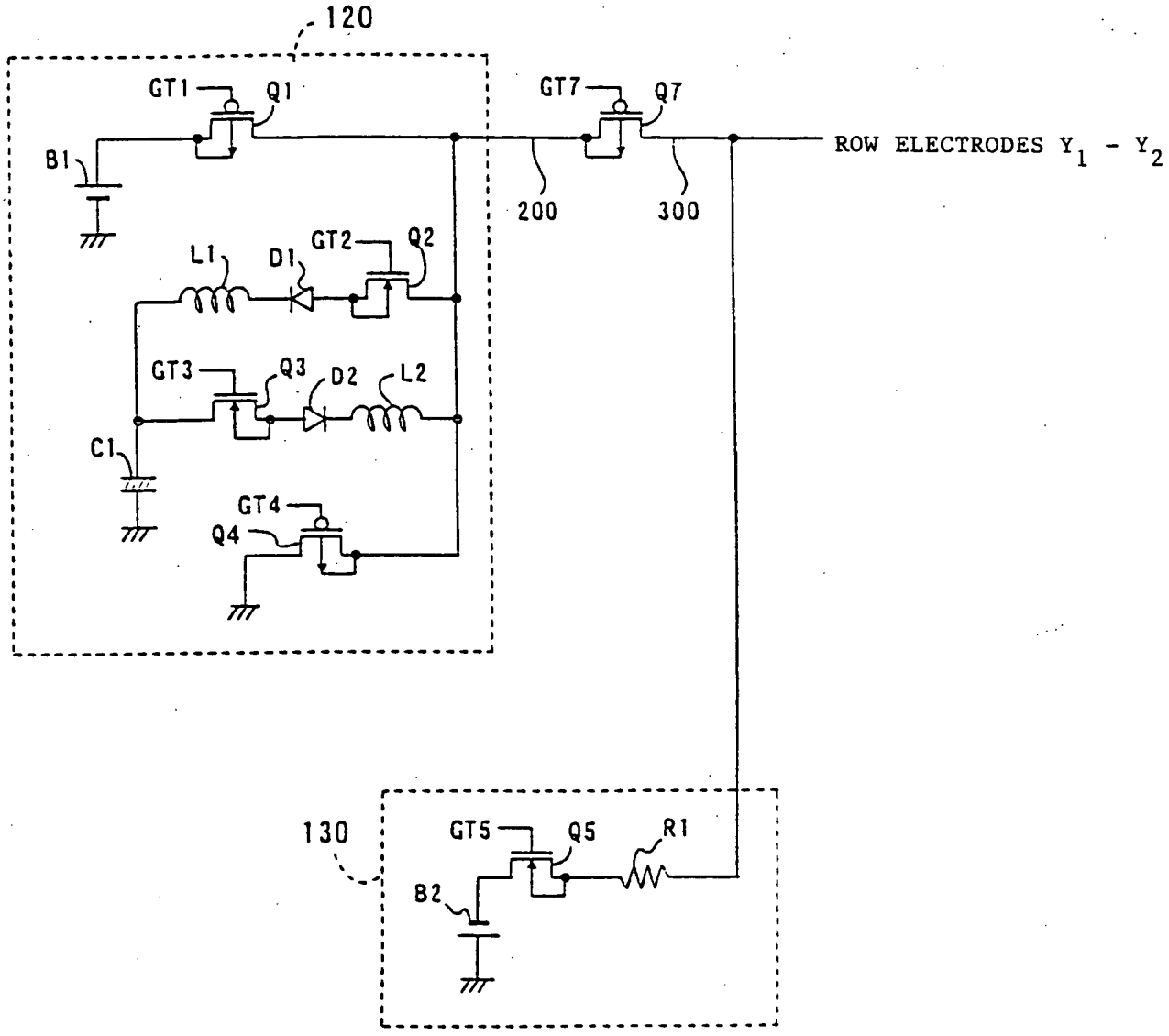
120
GT1
Q1
B1
GT7
Q7
ROW ELECTRODES Y_1 - Y_2
200
300
L1
D1
GT2
Q2
GT3
Q3
D2
L2
C1
GT4
Q4
130
GT5
Q5
R1
B2

FIG. 2

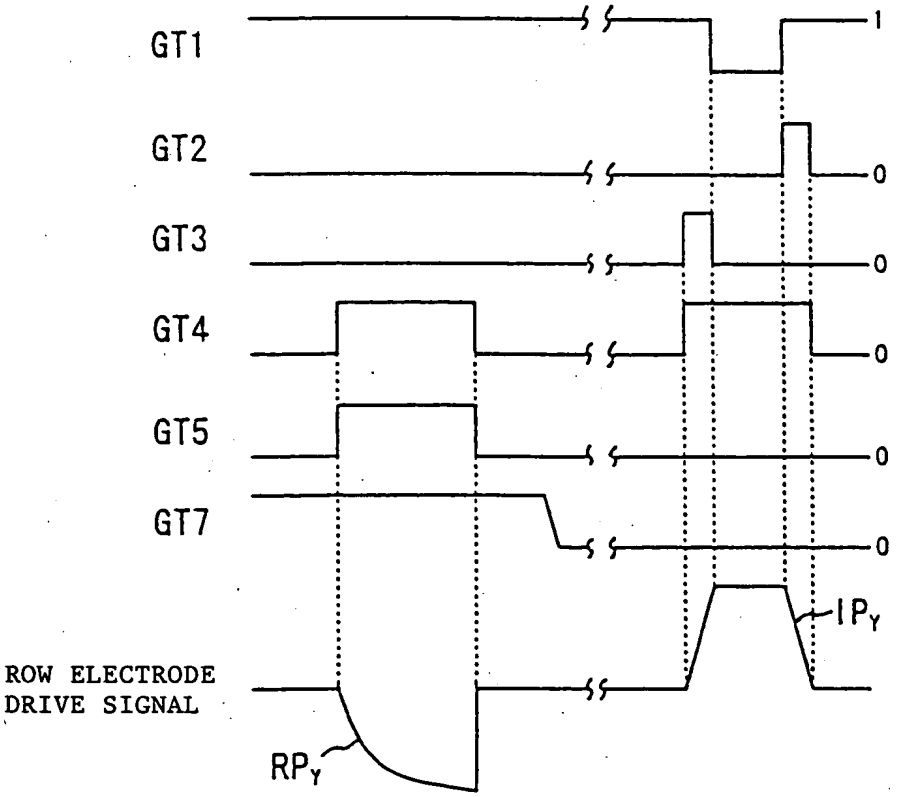
GT1
GT2
GT3
GT4
GT5
GT7
1
0
0
0
0
0
IPY
ROW ELECTRODE
DRIVE SIGNAL
RPY

FIG. 3

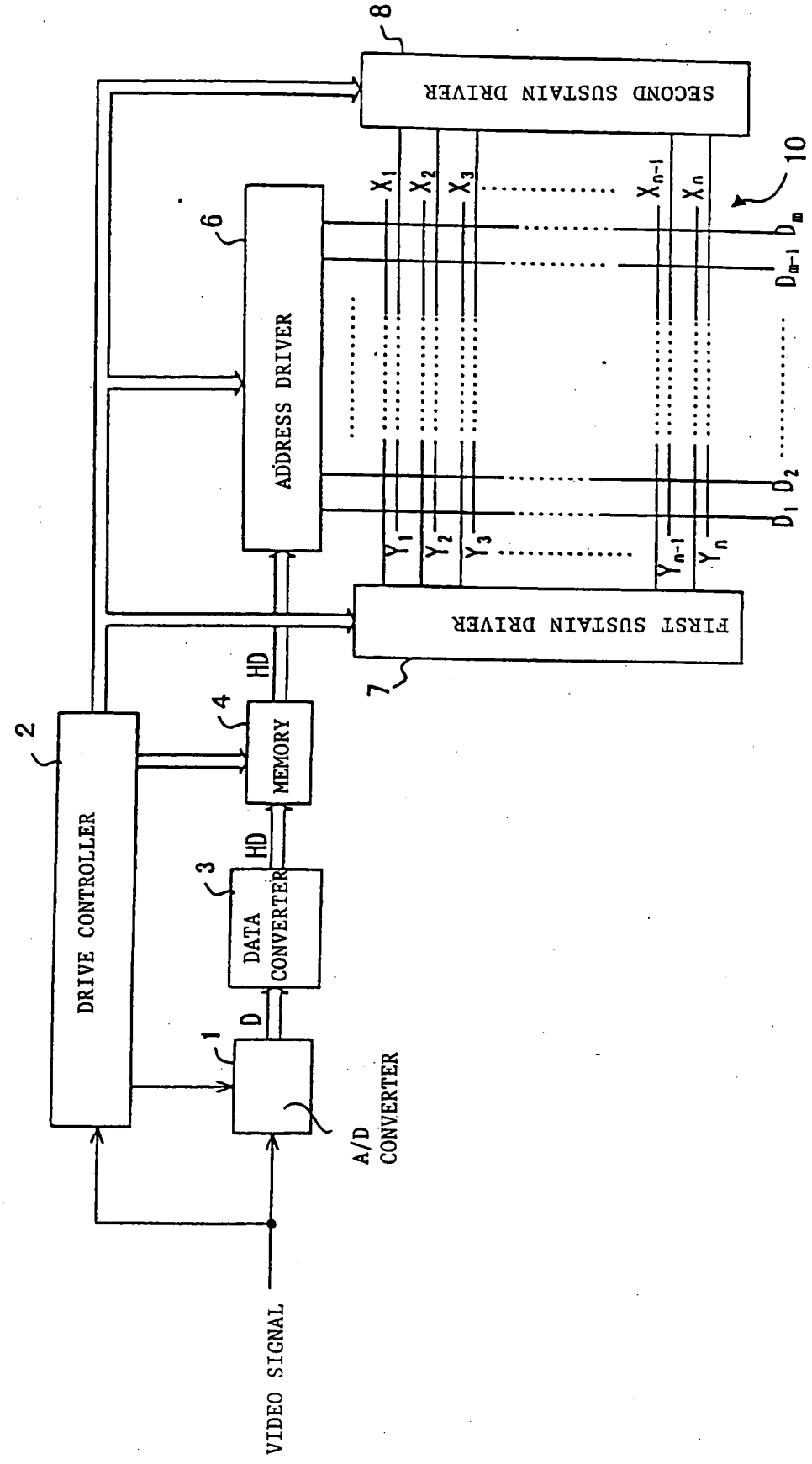
VIDEO SIGNAL
A/D CONVERTER
1
D
DATA CONVERTER
3
HD
MEMORY
4
HD
DRIVE CONTROLLER
2
FIRST SUSTAIN DRIVER
7
ADDRESS DRIVER
6
SECOND SUSTAIN DRIVER
8
10
X_1 X_2 X_3 X_{n-1} X_n
Y_1 Y_2 Y_3 Y_{n-1} Y_n
D_1 D_2 D_{m-1} D_m

FIG. 4

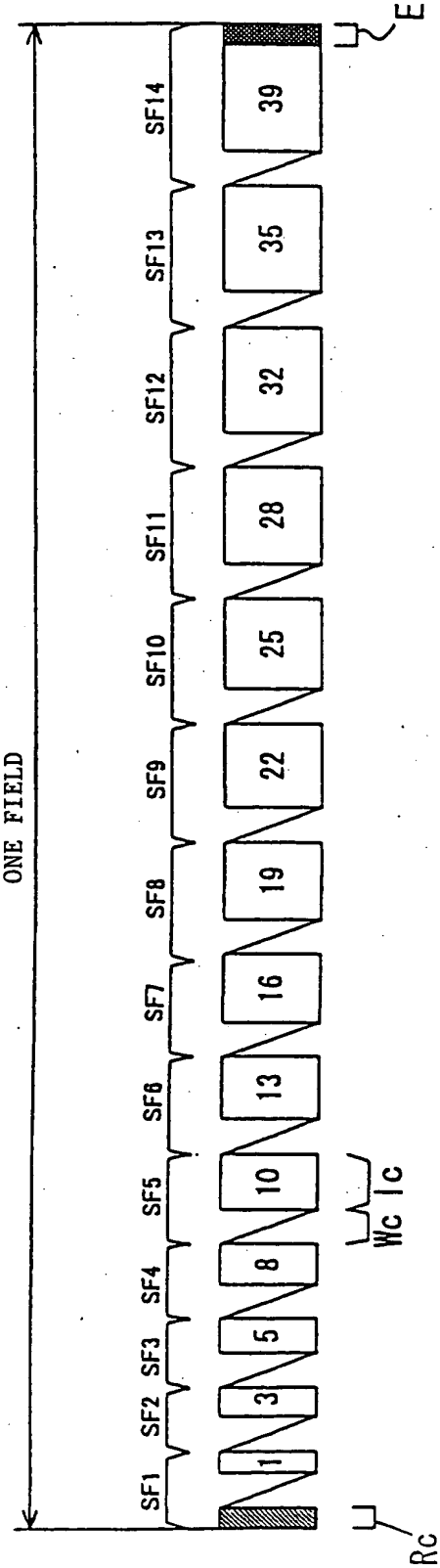
ONE FIELD
SF1
SF2
SF3
SF4
SF5
SF6
SF7
SF8
SF9
SF10
SF11
SF12
SF13
SF14
1
3
5
8
10
13
16
19
22
25
28
32
35
39
Rc
Wc
Ic
E

FIG.5

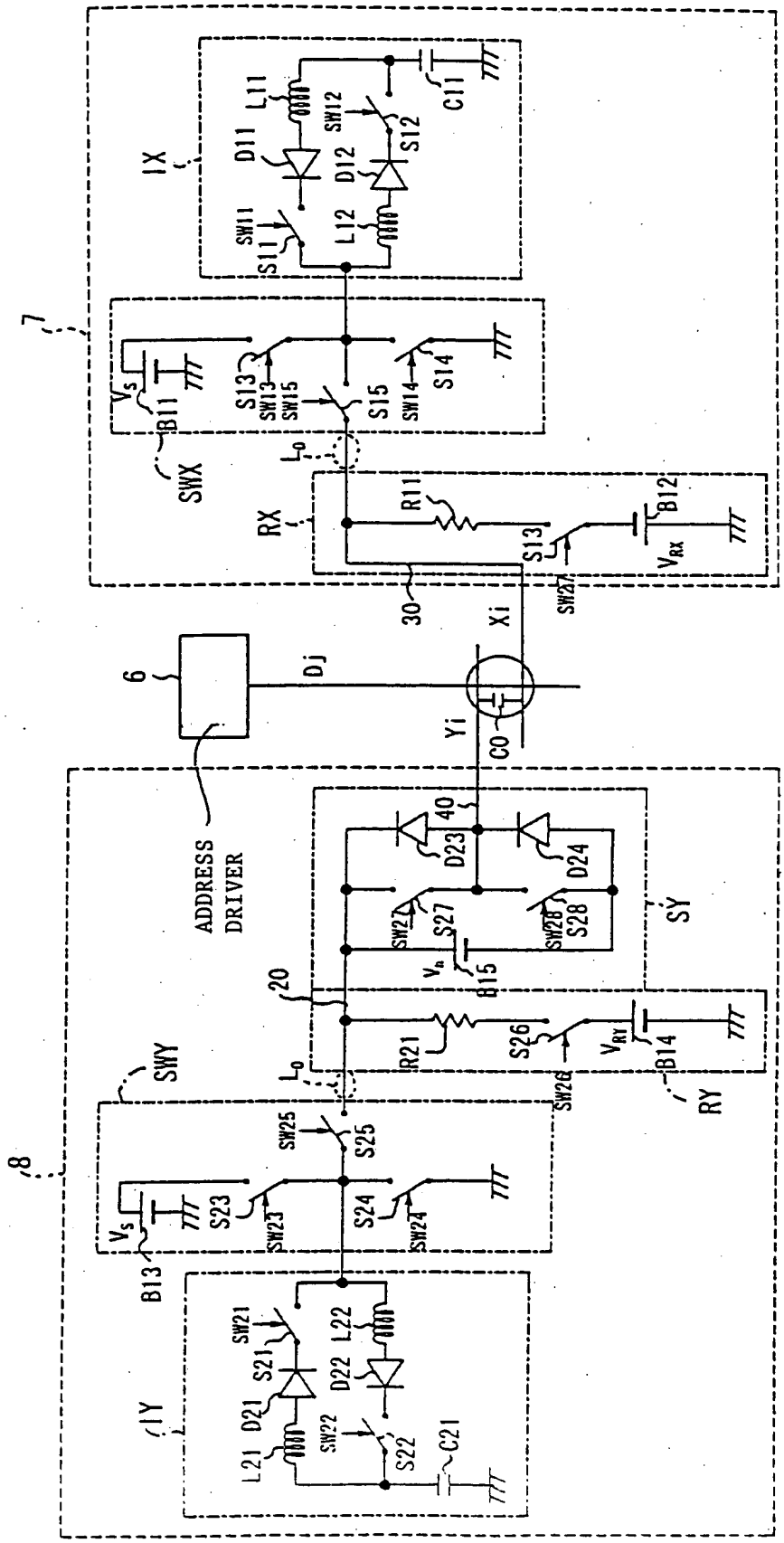
7
IX
L11
D11
SW12
S12
C11
SW11
S11
L12
D12
Vs
B11
S13
SW13
SW15
S15
SW14
S14
SWX
Lo
RX
R11
B12
S13
VRX
SW27
30
Xi
6
Dj
Yi
CO
ADDRESS DRIVER
40
D23
D24
SW21
S27
SW28
S28
SY
Vh
B15
20
R21
S26
VRY
B14
SW26
RY
SWY
Lo
SW25
S25
Vs
S23
SW23
S24
SW24
B13
8
IY
SW21
S21
D22
L22
L21
D21
SW22
S22
C21

FIG. 6

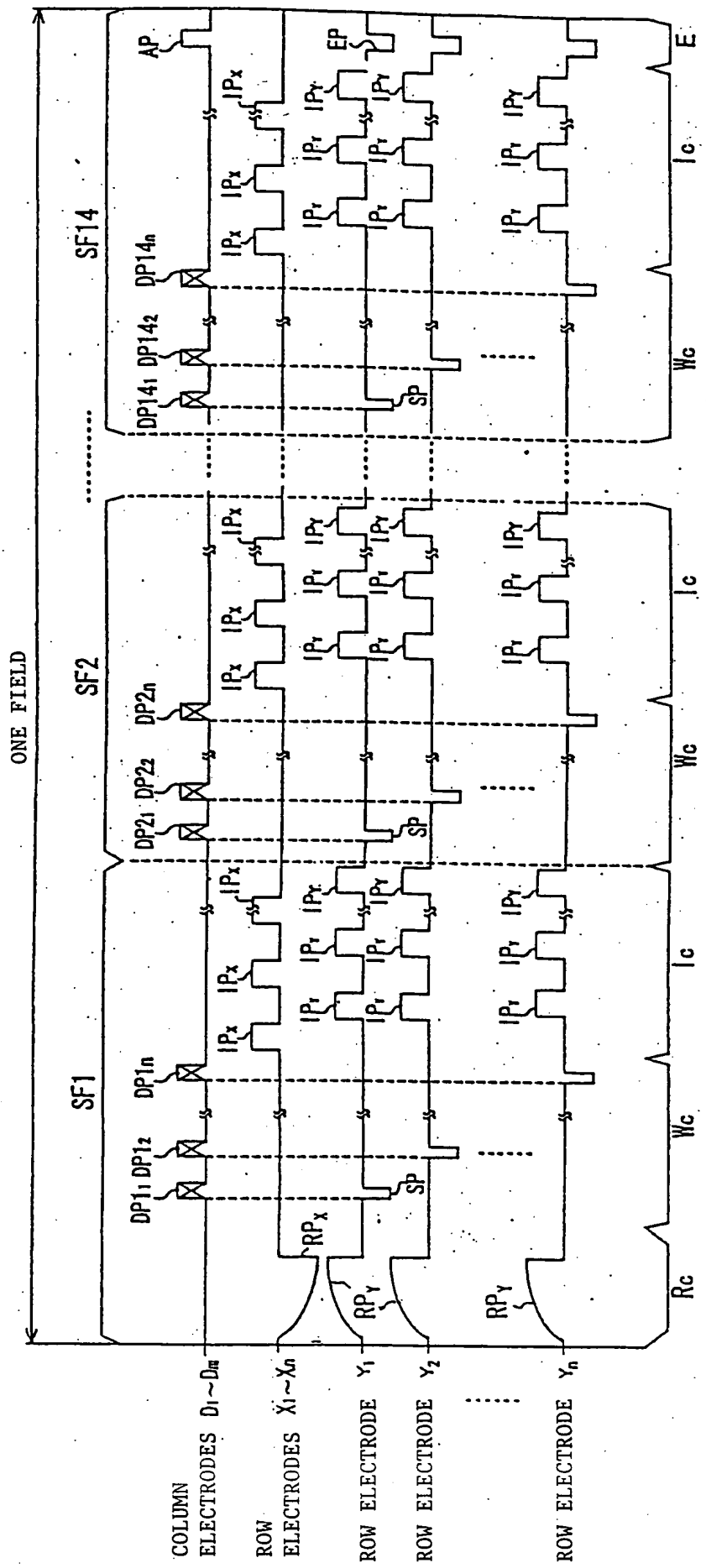
ONE FIELD
SF1
SF2
SF14
AP
EP
E
Ic
Wc
Rc
DP1n
DP2n
DP14n
SP
IPx
IPr
IPy
RPx
RPy
COLUMN ELECTRODES D1~Dm
ROW ELECTRODES X1~Xn
ROW ELECTRODE Y1
ROW ELECTRODE Y2
ROW ELECTRODE Yn

FIG. 7

Ds	HD 1	2	3	4	5	6	7	8	9	10	11	12	13	14	ONE FIELD EMISSION DRIVE PATTERN SF 1	SF 2	SF 3	SF 4	SF 5	SF 6	SF 7	SF 8	SF 9	SF 10	SF 11	SF 12	SF 13	SF 14	EMISSION INTENSITY
0000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	●														0
0001	0	1	0	0	0	0	0	0	0	0	0	0	0	0	○	●													1
0010	0	0	1	0	0	0	0	0	0	0	0	0	0	0	○	○	●												4
0011	0	0	0	1	0	0	0	0	0	0	0	0	0	0	○	○	○	●											9
0100	0	0	0	0	1	0	0	0	0	0	0	0	0	0	○	○	○	○	●										17
0101	0	0	0	0	0	1	0	0	0	0	0	0	0	0	○	○	○	○	○	●									27
0110	0	0	0	0	0	0	1	0	0	0	0	0	0	0	○	○	○	○	○	○	●								40
0111	0	0	0	0	0	0	0	1	0	0	0	0	0	0	○	○	○	○	○	○	○	●							56
1000	0	0	0	0	0	0	0	0	1	0	0	0	0	0	○	○	○	○	○	○	○	○	●						75
1001	0	0	0	0	0	0	0	0	0	1	0	0	0	0	○	○	○	○	○	○	○	○	○	●					97
1010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	○	○	○	○	○	○	○	○	○	○	●				122
1011	0	0	0	0	0	0	0	0	0	0	0	1	0	0	○	○	○	○	○	○	○	○	○	○	○	●			150
1100	0	0	0	0	0	0	0	0	0	0	0	0	1	0	○	○	○	○	○	○	○	○	○	○	○	○	●		182
1101	0	0	0	0	0	0	0	0	0	0	0	0	0	1	○	○	○	○	○	○	○	○	○	○	○	○	○	●	217
1110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	255

BLACK CIRCLE : SELECTIVE ERASE DISCHARGE
HOLLOW CIRCLE : EMISSION

FIG. 8

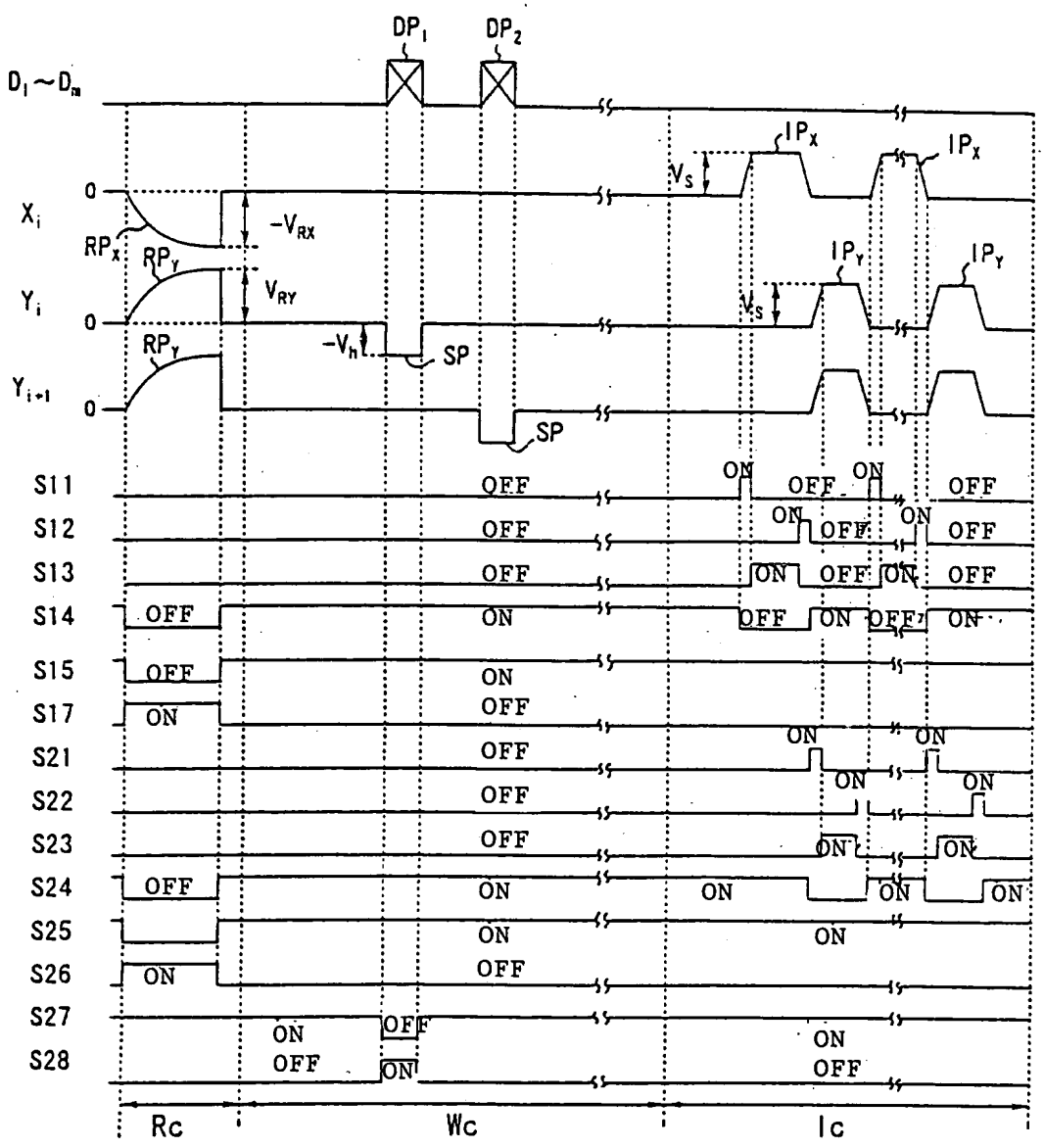
DP1
DP2
D1~Dm
Xi
Yi
Yi+1
RPX
RPY
-VRX
VRY
-Vh
SP
VS
IPX
IPY
S11
S12
S13
S14
S15
S17
S21
S22
S23
S24
S25
S26
S27
S28
ON
OFF
Rc
Wc
Ic

FIG. 9A

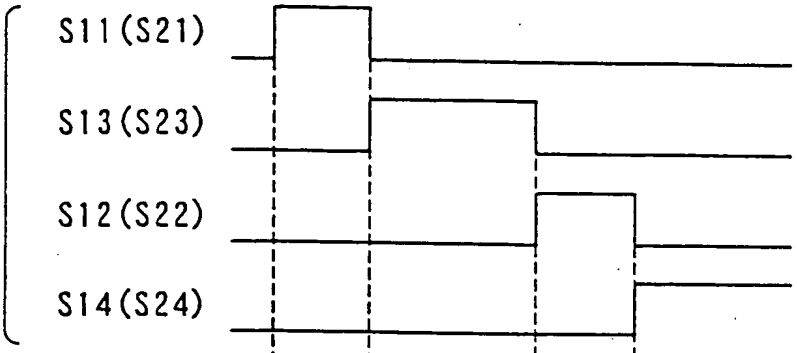

FIG. 9B

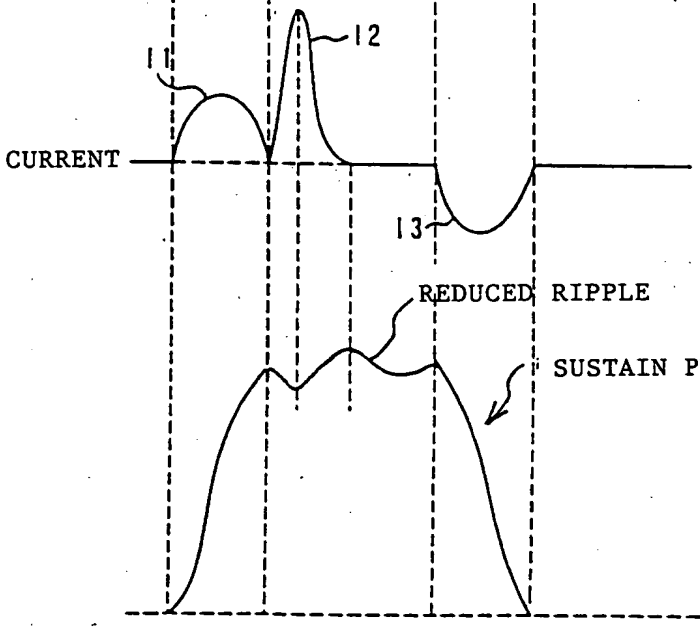

FIG. 9C

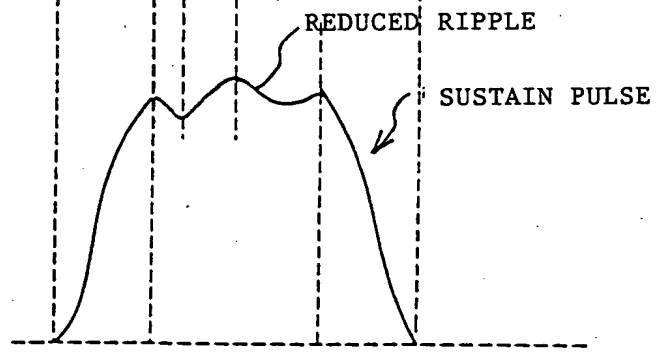
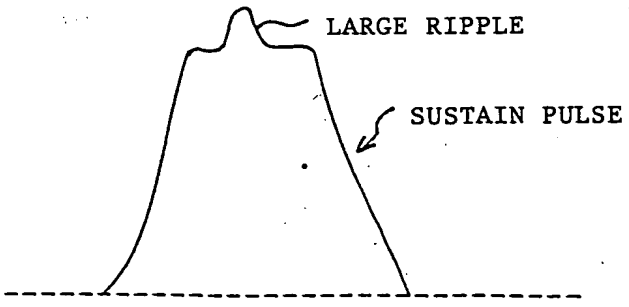
FIG. 9D